Amendments to the Claims

- 1 1. (currently amended) A computer implemented method for solving improving a solution to a combinatorial optimization problem including a 2 3 plurality of elements and a plurality of values, comprising the steps of: 4 applying a priority algorithm in a form of an ordering function to an 5 instance of the combinatorial optimization problem to produce an initial 6 solution including an ordering of the elements; 7 modifying the ordering of the elements to produce a re-ordering of the 8 elements; applying a placement function to map values to the corresponding 9 10 elements of the re-ordering; and 11 repeating the modifying and the applying until all elements have been 12 placed to obtain a an improved solution of the combinatorial optimization problem. 13 1 2. (previously presented) The method of claim 1, in which the priority 2 algorithm is fixed.
 - 1 3. (previously presented) The method of claim 1, in which the priority
 - 2 algorithm is dynamic.
 - 4. (original) The method of claim 1, in which the re-ordering is within a
- 2 predetermined distance of the ordering.

- 5. (original) The method of claim 4, in which the distance is a Kendall-tau
- 2 distance.
- 1 6. (previously presented) The method of claim 1, in which the re-ordering
- 2 uses a decision vector, and in which the decision vector has one field for
- 3 each element of the order, each field determining a new order of the element
- 4 in the re-ordering.
- 1 7. (original) The method of claim 1, in which the re-ordering is probabilistic.
- 8. (currently amended) A computer program product storing a computer
- 2 program which when executed by a the computer performs a method for
- 3 solving improving a solution to a combinatorial optimization problem
- 4 including a plurality of elements and a plurality of values by performing the
- 5 steps of:
- 6 applying a priority algorithm in a form of an ordering function to an
- 7 instance of the combinatorial optimization problem to produce an initial
- 8 <u>solution including</u> an ordering of the elements;
- 9 modifying the ordering of the elements to produce a re-ordering of the
- 10 elements;
- applying a placement function to map values to the corresponding
- 12 elements of the re-ordering; and
- repeating the modifying and the applying until all elements have been
- placed to obtain a <u>an improved</u> solution of the combinatorial optimization
- 15 problem.

9. (canceled)

- 1 10. (previously presented) The method of claim 9 claim 3, in which the re-
- 2 ordering is within a predetermined distance of the ordering.
- 1 11. (previously presented) The method of claim 10, in which the distance is
- 2 a Kendall-tau distance.
- 1 12. (previously presented) The method of claim-9 claim 3, in which the re-
- 2 ordering uses a decision vector, and in which the decision vector has one
- 3 field for each element of the order, each field determining a new order of the
- 4 element in the re-ordering.
- 1 13. (previously presented) The method of claim 9 claim 3, in which the re-
- 2 ordering is probabilistic.